Claims

1. A method for preserving an active agent comprising the steps of:
a) preparing a preservation sample by dissolving/suspending an active agent in a solution of a stabilising agent;
b) subjecting the preservation sample to such temperature and pressure conditions so that the preservation sample looses solvent by evaporation, without freezing or bubbling involved in foam formation, to form a viscous liquid.

2. The method of claim 1, further comprising a step of:
c) further subjecting the preservation sample to such temperature and pressure conditions so that the viscous liquid dries to form a highly viscous liquid.

3. The method of claim 1 or 2 wherein the pressure is reduced to 20 mbars or below during step b).

4. The method of claim 1-3 wherein the temperature external to the preservation sample is between 5°C and 37°C during step b).

5. The method of claim 2-4 wherein the temperature external to the preservation sample is between 5°C and 37°C during step c).

6. The method of claim 2-5 wherein the temperature external to the preservation sample is higher during step c) than it is in step b).

7. The method of claim 6 wherein the temperature external to the preservation sample is increased to above 20°C during step c).

8. The method of claim 2-7 wherein the pressure is reduced in step c) compared to the pressure during step b).

9. The method of claim 8 wherein the pressure is reduced to 1mbar or below during step c).

10. The method of claim 1-9 wherein step b) is completed in less than 4 hours.

11. The method of claim 2-10 wherein steps b) and c) are completed in less than 12 hours.

12. The method of claim 1-11 wherein the stabilising agent comprises a glass forming polyol, selected from the group consisting of glucose, maltulose, iso-maltulose, lactulose, sucrose, maltose, lactose, sorbitol, iso-maltose, maltitol, lactitol, palatinit, trehalose, raffinose, stachyose, melezitose and dextran.

13. The method of claim 12 wherein the stabilising agent is sucrose.

14. The method of claim 12-13 wherein the concentration of stabilising agent is less than 15%.

15. The method of claim 1-14 wherein the preservation sample comprises phenol red.

16. The method of claims 1-15 wherein the preservation sample is dried in a container with a solvent repellent interior surface.

17. The method of claims 1-16 wherein the active agent comprises a molecule selected from the group consisting of protein, peptide, amino acid, polynucleotide, oligonucleotide, polysaccharide, oligosaccharide, polysaccharide-protein conjugate and oligosaccharide-protein conjugate.

18. The method of claim 1-16 wherein the active agent comprises a biological system selected from the group consisting of cells, subcellular compositions, bacteria, viruses, virus components and virus like particles.

19. The method of claim 18 wherein the active agent comprises IPV (inactivated polio virus).

20. The method of claim 18-19 wherein the active agent comprises Hib (*Haemophilus influenzae* type b) polysaccharide or oligosaccharide.

21. The method of claim 18-20 wherein the active agent comprises *Neisseria meningitidis* C polysaccharide or oligosaccharide.

22. The method of claims 1-21 wherein the active agent comprises a vaccine.

23. A highly viscous liquid comprising an active agent wherein the antigenicity or activity of the active agent is preserved.

24. The highly viscous liquid of claim 23 obtainable by the method of claims 1-22.

25. The highly viscous liquid of claim 23 or 24 comprising a glass forming polyol selected from the group consisting of glucose, maltulose, iso-maltulose, lactulose, sucrose, maltose, lactose, sorbitol, iso-maltose, maltitol, lactitol, palatinit, trehalose, raffinose, stachyose, melezitose and dextran.

26. The highly viscous liquid of claim 25wherein the glass forming polyol is sucrose.

27. The highly viscous liquid of claim 23-26 wherein the active agent comprises comprises a molecule selected from the group consisting of protein, peptide, amino acid, polynucleotide, oligonucleotide, polysaccharide, oligosaccharide, polysaccharide-protein conjugate and oligosaccharide-protein conjugate.

28. The highly viscous liquid of claim 23-27 wherein the active agent comprises a biological system selected from the group consisting of cells, subcellular compositions, bacteria, viruses, virus components and virus like particles.

29. The highly viscous liquid of claim 23-28 wherein the active agent comprises a vaccine.

30. The highly viscous liquid of claim 23-29 wherein the active agent comprises IPV.

31. The highly viscous liquid of claim 23-30 wherein the active agent comprises a bacterial polysaccharide or oligosaccharide.

32. The highly viscous liquid of claim 31 wherein the active agent comprises Hib (*Haemophilus influenzae* b) polysaccharide or oligosaccharide, preferably conjugated to a carrier protein.

33. The highly viscous liquid of claim 23-32 wherein the active agent comprises Neisseria meningitidis serogroup C polysaccharide or oligosaccharide, preferably conjugated to a carrier protein.

34. The highly viscous liquid of claim 23-33 held within a container with a solvent repellent interior surface.

35. An immunogenic composition or vaccine comprising the highly viscous liquid of claim 23-24 and a pharmaceutically acceptable excipient.

36. A method of making a vaccine comprising the step of reconstituting the highly viscous liquid of claim 23-35 in an aqueous solution.

37. The method of claim 36 wherein the aqueous solution comprises Diphtheria antigen, Tetanus antigen and Pertussis antigens (acellular or whole cell).

38. The method of claim 37 where the DTP vaccine is at least in part adjuvanted with aluminium hydroxide.

39. A kit comprising the highly viscous liquid of claims 23-34 held in a first container and a liquid vaccine component in a second container.